ATTACHMENT 3

Attachment 3

Detailed Description and Construction Schedule

Facility Name: **Transfer Pipeline**

Length: Approximately 15,000 lineal feet

Diameter: 36 inches

General Description: The Transfer Pipeline will allow for the delivery of desalinated water to the Monterey Peninsula from the Regional Project. This pipeline alignment begins at a metering station planned to be located in the general vicinity of Beach Range Road and the Highway 1/First Street interchange in Marina. This metering station would be the connection point to the Regional Pipeline constructed and owned by Marina Coast Water District. The pipeline alignment would continue in a southerly direction, generally paralleling the TAMC right-of-way through unincorporated Monterey County and into Seaside. At one point, the pipeline alignment would pass under Highway 1 at the Seaside border, while continuing in the TAMC right-of-way just north of Del Monte Boulevard. Eventually, the pipeline alignment would reach a point in the TAMC right-of-way that is just north of the intersection of Auto Center Parkway and Del Monte Boulevard. The Transfer Pipeline would connect with the Seaside and Monterey Pipelines in this general location.

Estimated Cost and Project Budget Cap: ~~$11,000,000~~ 8,140,000 (Median Scenario)[1]

Schedule: Start September 2011; Complete April 2014

Components:

Land/ROW Acquisition: 12 months, start August 2010; complete July 2011
Preliminary Design: 9 months, start September 2011; complete May 2012
Detailed Design: 9 months, start November 2012; complete July 2013
Construction: 5 months, start December 2013; complete April 2014

Conceptual Capital Cost Estimates – Project Cashflow under Low, ~~Medium~~Median and High Scenarios

Date/Scenario	LOW SCENARIO	~~MEDIUM~~MEDIAN SCENARIO	HIGH SCENARIO
~~2010~~	~~$0~~	~~$0~~	~~$0~~
~~2011~~	~~$87,000~~	~~$100,000~~	~~$125,000~~
~~2012~~	~~$565,000~~	~~$650,000~~	~~$812,000~~
~~2013~~	~~$4,565,000~~	~~$5,250,000~~	~~$6,563,000~~
~~2014~~	~~$4,348,000~~	~~$5,000,000~~	~~$6,250,000~~

[1] Revised Project Budget Cap, after applying the adjustments recommended in DRA Testimony, page 2-12, Table 2.

Date/Scenario	LOW SCENARIO	~~MEDIUM~~MEDIAN SCENARIO	HIGH SCENARIO
~~2015~~	~~$0~~	~~$0~~	~~$0~~
~~2106~~	~~$0~~	~~$0~~	~~$0~~
TOTAL	~~$9,565,000~~ $6,919,000	~~$11,000,000~~ $8,140,000	~~$13,750,000~~ $10,175,000

Facility Name: **Seaside Pipeline**

Length: Approximately 13,000 lineal feet

Diameter: 36 inches

General Description: The Seaside Pipeline will allow for: 1) the movement of extracted ASR water from the ASR facilities through the Terminal Reservoirs and ultimately to the Monterey Pipeline; 2) the movement of Carmel River water to the Terminal Reservoirs and ultimately to the ASR facilities for injection; and 3) the movement of desalinated water to the Terminal Reservoirs to help balance distribution system operation during periods of high customer demand. In general, the pipeline alignment runs east on Auto Center Parkway for approximately 1,125 feet, and then changes to LaSalle Avenue. The pipeline alignment continues east on La Salle Avenue for approximately 3,675 feet to Yosemite Street. Thereafter, the pipeline alignment turns south on Yosemite Street for approximately 5,400 feet to Hilby Avenue, where the pipeline alignment then turns east on Hilby Avenue. The pipeline alignment follows Hilby Avenue and crosses General Jim Moore Boulevard, where the pipeline would ultimately tie-in to the Terminal Reservoirs and the ASR System facilities. This pipeline alignment contains two trenchless crossings on Auto Center Parkway of 500 feet each, namely at Del Monte Boulevard and at Fremont Street. Approximately 1,000 lineal feet of 30-inch diameter main was installed in Hilby Avenue in 2006 as part of another capital project.

Estimated Cost: ~~–~~ Project Budget Cap ~~$15,000,000~~11,100,000 (Median Scenario)[2]

Schedule: Start September 2010; Complete March 2013

Components:

Land/ROW Acquisition: 12 months, start August 2010; complete July 2011
Preliminary Design: 9 months, start September 2010; complete May 2011
Detailed Design: 9 months, start November 2011; complete July 2012
Construction: 6 months, start October 2012; complete March 2013

Conceptual Capital Cost Estimates – Project Cashflow under Low, ~~Medium~~Median and High Scenarios

[2] Ibid.

Date/Scenario	LOW SCENARIO	~~MEDIUM~~MEDIAN SCENARIO	HIGH SCENARIO
~~2010~~	~~$435,000~~	~~$500,000~~	~~$625,000~~
~~2011~~	~~$4,783,000~~	~~$5,500,000~~	~~$6,875,000~~
~~2012~~	~~$7,826,000~~	~~$9,000,000~~	~~$11,250,000~~
~~2013~~	~~$0~~	~~$0~~	~~$0~~
~~2014~~	~~$0~~	~~$0~~	~~$0~~
~~2015~~	~~$0~~	~~$0~~	~~$0~~
~~2106~~	~~$0~~	~~$0~~	~~$0~~
TOTAL	~~$13,044,000~~ 9,435,000	~~$15,000,000~~ 11,100.000	~~$18,750,000~~ 13,875,000

Facility Name: **Monterey Water Pipeline**

Length: Approximately 28,700 lineal feet

Diameter: 36 inches

General Description: The Monterey Pipeline will allow for the delivery of desalinated water and ASR water to Forest Lake Tanks, which would ultimately feed into Carmel Valley. This pipeline alignment has nine segments that are described in more detail below. In general, the pipeline alignment begins at the intersection of Auto Center Parkway and Del Monte Boulevard. This three-way interconnection also includes the Seaside Pipeline and Transfer Pipeline. The alignment generally follows the TAMC railroad alignment in a westerly direction, continues along the Monterey Regional Park District (MRPD) bike path, and passes under Highway 1, while continuing through the Naval Postgraduate School (NPS) and El Estero Park. Shortly thereafter, the pipeline alignment crosses Del Monte Avenue utilizing trenchless construction to Cortes Street, and then continues west on Franklin Street to Van Buren Street. The pipeline alignment heads north on Van Buren Street and crosses the Presidio property in an existing pipeline easement. The pipeline alignment would continue on to Laine Street, turn southwest on Dickman Drive, and then turn north on Spencer Street all the way to Eardley Street. Finally, the pipeline alignment would turn southwest on Eardley Street, and connect to an existing pipeline near the Eardley Pump Station. The Monterey Pipeline has a total estimated cost of $25,000,000 (Median Scenario)

Monterey Pipeline Segment Number 1 (Sand City): This pipeline segment is approximately 4,000 feet in length, and it originates at the junction of the Product Pipeline and the Seaside Pipeline in Sand City, just north of the intersection of Auto Center Parkway and Del Monte Boulevard in Sand City, within the TAMC right-of-way.

This pipeline segment is planned to parallel the existing TAMC right-of way in a westerly direction, and features crossings at Tioga Avenue, Contra Costa Street and Olympia Avenue. This pipeline segment would generally end in the proximity of the Sand City/Seaside border.

Monterey Pipeline Segment Number 2 (Seaside): This pipeline segment is approximately 3,000 feet in length, and it begins at Olympia Avenue (border of Sand City and Seaside). This pipeline segment is planned to parallel the existing TAMC right-of-way for approximately 1,500 feet, and would also be located within the Monterey Regional Parks District bike path for approximately 1,500 feet. There are several crossings along this westerly route, namely the Laguna Grande Bridge, and trenchless construction is planned across Highway 218 (Canyon Del Rey Boulevard) and the TAMC railroad tracks. This pipeline segment would generally end in the proximity of the Seaside/Monterey border.

Monterey Pipeline Segment Number 3 (Monterey – East of NPS): This pipeline segment is approximately 5,000 feet in length, and it begins at Roberts Avenue (border of Seaside and Monterey). This pipeline segment is planned to parallel the existing Monterey Regional Parks District bike path, just north of Del Monte Boulevard. There are several crossings along this westerly route, namely Roberts Avenue, passing beneath the Highway 1 Overpass, and Casa Verde Way. This pipeline segment would generally end in the proximity of the Monterey/NPS border (which is Federal land).

Monterey Pipeline Segment Number 4 (Naval Postgraduate School): This pipeline segment is approximately 3,000 feet in length, and begins just north of the intersection of Palo Verde avenue and Del Monte Boulevard (border of Monterey and the NPS). This pipeline segment is planned to parallel the existing Monterey Regional Parks District bike path, just north of Del Monte Boulevard. There is one deep crossing along this westerly route, a storm drain just south of the abandoned Monterey sewer treatment plant. This pipeline segment would generally end in the proximity of the NPS/Monterey border (near the intersection of Sloat Avenue and Del Monte Boulevard).

Monterey Pipeline Segment Number 5 (Monterey – West of NPS): This pipeline segment is approximately 2,600 feet in length, and begins just north of the intersection of Sloat Avenue and Del Monte Boulevard (border of NPS and Monterey. This pipeline segment continues to parallel the existing Monterey Regional Parks District bike path, just north of Del Monte Boulevard for about 2,000 feet. The pipeline segment would then turn south for approximately 600 feet toward and down Cortes Street. There is one deep crossing along this westerly route, a storm drain from El Estero Park, a crossing for Park Avenue, and also includes approximately 300 feet of trenchless crossing beneath Del Monte Boulevard and the TAMC right-of-way. This pipeline segment would generally end at the intersection of Cortes Street and East Franklin Street, within the City of Monterey.

Monterey Pipeline Segment Number 6 (Downtown Monterey): This pipeline segment is approximately 4,500 feet in length, and begins at the intersection of Cortes Street and Franklin Street in Monterey. This pipeline segment follows Franklin Street in a westerly

direction for approximately 3,000 feet, and then turns north on Van Buren Street for approximately 1,500 feet to the boundary of Monterey and the Presidio of Monterey (Federal Land). There is one deep crossing along this pipeline segment, a storm drain located within Figueroa Street. There is also a creek crossing on Van Buren Street, just south of the Presido of Monterey boundary. This pipeline segment would generally end in the vicinity of Van Buren Street and Artillery Street (border of Monterey and Presidio of Monterey).

Monterey Pipeline Segment Number 7 (Presidio of Monterey): This pipeline segment is approximately 1,500 feet in length, and generally follows an existing 20 foot wide easement granted for use to California American Water by the Presidio of Monterey. The pipeline segment begins in the general vicinity of Artillery Street and Van Buren Street (southern border of Monterey and the Presido of Monterey), and ends at the intersection of Private Bolio Road and Laine Street (northwestern border of Presidio of Monterey and Monterey). It should be recognized that alternate routes may need to be explored/negotiated with the Presidio of Monterey, which could result in a longer pipeline segment and increased construction costs.

Monterey Pipeline Segment Number 8 (Western Monterey): This pipeline segment is approximately 3,100 feet in length, and begins at the intersection of Private Bolio Road and Laine Street (northwestern border of Presidio of Monterey and Monterey. The pipeline segment follows Laine Street approximately 500 feet north to Dickman Avenue, where the pipeline segment turns southwest on Dickman Avenue for approximately 600 feet to Spencer Street, where the pipeline segment turns north again on Spencer Street for approximately 2,000 feet to the intersection of Spencer Street and Eardley Avenue, which is about 200 feet east of the Monterey/Pacific Grove border.

Monterey Pipeline Segment Number 9 (Pacific Grove): This pipeline segment is approximately 2,200 feet in length, and begins on Spencer Street at the border between Monterey and Pacific Grove. The pipeline segment follows Spencer Street for about 200 feet to the intersection of Eardley Street, where the pipeline segment would turn southwest on Eardley Street for 2,000 feet until it terminates near the existing Eardley Pump Station in Pacific Grove. This pipeline segment would interconnect to an existing pipeline that connects to the Forest Lake Tanks (three 5 million gallon reservoirs in Pacific Grove).

Valley Greens Pump Station: This booster station will pump water to the Segunda Tanks (Numbers 1 and 2), to help provide operational flexibility in maintaining storage levels in the Forest Lake Tanks, while also allowing the transfer of treated water from Begonia Iron Removal Plant to Seaside for ASR injection and for meeting system demands.

Estimated Cost and Project Budget Cap: ~~$25,000,000~~18,500,000[3]

Schedule: Start September 2010; Complete March 2013

[3] Ibid.

Components: Land/ROW Acquisition: 12 months, start August 2010; complete July 2011
Preliminary Design: 9 months, start September 2010; complete May 2011
Detailed Design: 9 months, start July 2011; complete March 2012
Construction: 11 months, start May 2012; complete March 2013

Conceptual Capital Cost Estimates – Project Cashflow under Low, ~~Medium~~Median and High Scenarios

Date/Scenario	LOW SCENARIO	~~MEDIUM~~MEDIAN SCENARIO	HIGH SCENARIO
~~2010~~	~~$435,000~~	~~$500,000~~	~~$625,000~~
~~2011~~	~~$6,087,000~~	~~$7,000,000~~	~~$8,750,000~~
~~2012~~	~~$8,696,000~~	~~$10,000,000~~	~~$12,500,000~~
~~2013~~	~~$6,522,000~~	~~$7,500,000~~	~~$9,375,000~~
~~2014~~	~~$0~~	~~$0~~	~~$0~~
~~2015~~	~~$0~~	~~$0~~	~~$0~~
~~2106~~	~~$0~~	~~$0~~	~~$0~~
TOTAL	~~$21,740,000~~ $15,725,000	~~$25,000,000~~ $18,500,000	~~$31,250,000~~ $23,125,000

Facility Name: **Terminal Reservoirs**

General Description: The Terminal Reservoirs are planned to be twin, 3 million gallon pre-stressed concrete water storage tanks located within the City of Seaside, just east of General Jim Moore Boulevard, and generally across from Hilby Avenue. The parties understand and agree that all tank options (i.e., at-grade, partially buried, or completely buried) will be investigated for technical feasibility, practicality, economic viability and appearance. In addition, meetings have been held, and will continue to be held with City of Seaside staff to examine the best plans for siting these facilities in this area of Seaside. As appropriate, the parties agree that DRA Staff can attend these meetings for purposes of understanding the on-going discussions between the City of Seaside and California American Water. The parties agree that should the City of Seaside require the reservoirs to be completely buried for aesthetic or other property related reasons, then the entire cost of such construction requirement will be recognized in rate base. Conversely, if an alternative above-ground approach is deemed acceptable to the City of Seaside, then the corresponding cost will be reflected in rate base. In either scenario, recovery of the appropriate investment will occur in rates in a timely fashion consistent with rate treatment for all other facilities. This facility will also include a pump station identified as the ASR Pump Station,

which is currently planned to have a pumping capacity of 8.4 million gallons per day. The cost estimate and final design will be based on final design injection capacity of the ASR well facilities. This facility will also include approximately 4,000 lineal feet of 30-inch diameter and 36-inch diameter pipeline for transferring stored water in the reservoirs to the ASR facilities or into the California American Water distribution system via the Seaside Pipeline. Finally, this facility will also include ASR discharge pipeline, yard piping, overflow piping, and a valve structure adjacent to General Jim Moore Boulevard.

Estimated Cost and Project Budget Cap: ~~$17,000,000~~ 9,620,000[4]

Schedule: Start February 2010; Complete March 2013

Components:

Land/ROW Acquisition: 8 months, start February 2010; complete December 2010
Preliminary Design: 7 months, start March 2010; complete December 2010
Detailed Design: 10 months, start December 2010; complete September 2011
Construction: 16 months, start December 2011; complete March 2013

Conceptual Capital Cost Estimates – Project Cashflow under Low, ~~Medium~~Median and High Scenarios

Date/Scenario	**LOW SCENARIO**	**~~MEDIUM~~MEDIAN SCENARIO**	**HIGH SCENARIO**
~~2010~~	~~$304,000~~	~~$350,000~~	~~$438,000~~
~~2011~~	~~$1,783,000~~	~~$2,050,000~~	~~$2,562,000~~
~~2012~~	~~$7,043,000~~	~~$8,100,000~~	~~$10,125,000~~
~~2013~~	~~$5,653,000~~	~~$6,500,000~~	~~$8,125,000~~
~~2014~~	~~$0~~	~~$0~~	~~$0~~
~~2015~~	~~$0~~	~~$0~~	~~$0~~
~~2106~~	~~$0~~	~~$0~~	~~$0~~
TOTAL	~~$14,783,000~~ $8,177,000	~~$17,000,000~~ $9,620,000	~~$21,250,000~~ $12,025,000

Facility Name: **Aquifer Storage and Recovery System (ASR)**

[4] Ibid.

General Description: The ASR Facilities include the following components: 1) 5,000 feet of 30-inch diameter pipeline in General Jim Moore Boulevard for transferring water to the ASR wells (for injection) and from the ASR wells (after extraction); 2) 5,000 feet of 12-inch diameter pipeline in General Jim Moore Boulevard for recirculation purposes (keep water quality from degrading); 3) 3,000 feet of 20-inch diameter pipeline in General Jim Moore Boulevard for backflushing purposes; 4) a 400,000 gallon reclamation basin for storage after backflushing; 5) two ASR production wells located generally in Fitch Park; and 6) a monitoring well also located in Fitch Park for purposes of tracking groundwater aquifer levels going into the future. The cost to construct the ASR production wells is currently based upon information provided by an engineering consultant experienced in this type of well construction.

Estimated Cost~~:~~ and Project Budget Cap: ~~$27,000,000~~ $17,575,000.[5]

Schedule: Start March 2010; Complete December 2012

Components:

Land/Right of Way ("ROW") Acquisition: 6 months, start June 2010; complete September 2010

Preliminary Design: 6 months, start March 2010; complete September 2010

Detailed Design: 9 months, start January 2011; complete September 2011

Construction: 15 months, start November 2011; complete December 2012

Conceptual Capital Cost Estimates – Project Cashflow under Low, ~~Medium~~Median and High Scenarios

Date/Scenario	**LOW SCENARIO**	**~~MEDIUM~~MEDIAN SCENARIO**	**HIGH SCENARIO**
~~2010~~	~~$1,304,000~~	~~$1,500,000~~	~~$1,875,000~~
~~2011~~	~~$11,739,000~~	~~$13,500,000~~	~~$16,875,000~~
~~2012~~	~~$10,435,000~~	~~$12,000,000~~	~~$15,000,000~~
~~2013~~	~~$0~~	~~$0~~	~~$0~~
~~2014~~	~~$0~~	~~$0~~	~~$0~~
~~2015~~	~~$0~~	~~$0~~	~~$0~~
~~2106~~	~~$0~~	~~$0~~	~~$0~~
TOTAL	~~$23,478,000~~ $14,938,750	~~$27,000,000~~ $17,575,000	~~$33,750,000~~ $21,968,750

[5] Ibid.

Attachment 4

Conceptual Capital Cost Estimates – Project Cashflow under Low, ~~Medium~~Median and High Scenarios[6]

Date/Scenario	LOW SCENARIO	~~MEDIUM~~MEDIAN SCENARIO	HIGH SCENARIO
~~2010~~	~~$2,478,000~~	~~$2,850,000~~	~~$3,563,000~~
~~2011~~	~~$24,479,000~~	~~$28,150,000~~	~~$35,187,000~~
~~2012~~	~~$34,565,000~~	~~$39,750,000~~	~~$49,687,000~~
~~2013~~	~~$16,740,000~~	~~$19,250,000~~	~~$24,063,000~~
~~2014~~	~~$4,348,000~~	~~$5,000,000~~	~~$6,250,000~~
~~2015~~	~~$0~~	~~$0~~	~~$0~~
~~2106~~	~~$0~~	~~$0~~	~~$0~~
TOTAL	~~$82,610,000~~ $59,500,000	~~$95,000,000~~ $70,000,000	~~$118,750,000~~ $87,500,000

300079272.1

[6] DRA Recommended Conceptual Capital Cost Estimate Cap according to DRA Testimony, p. 2-11.